WHAT IS CLAIMED IS:

1. A system multiplexing apparatus outputting a video pack and an audio pack multiplexed with each other, comprising:

a calculating unit calculating a time zone to be set in a video object unit, in accordance with audio bit rate;

a comparing unit comparing a time point of multiplexing the audio pack with the time zone calculated by said calculating unit; and

a setting unit setting whether the audio pack is to be completed or not in accordance with the result of comparison by said comparing unit.

2. The system multiplexing apparatus according to claim 1, wherein

said calculating unit defines the time zone from a time point earlier by an audio pack period than a group-of-picture boundary time point to said video object unit boundary time point.

3. The system multiplexing apparatus according to claim 1, wherein

said setting unit sets, when audio frame length is not shorter than a prescribed value, whether the audio pack is to be completed or not in accordance with a result of comparison by said comparing unit and

said setting unit sets, when said audio frame length is shorter than the prescribed value, forced completing of the audio frame immediately after said video object unit boundary time point.

4. The system multiplexing apparatus according to claim 1, wherein

said setting unit calculates audio buffer remaining capacity, determines whether a buffer overflow occurs or not if an uncompleted audio pack is output, and determines whether the audio pack is to be completed or not.

5. A system multiplexing apparatus outputting a video pack and an audio pack multiplexed with each other, comprising:

a comparing unit comparing a time point of multiplexing the audio pack with a time zone set in advance in a video object unit; and

a setting unit setting whether the audio pack is to be completed or not in accordance with the result of comparison by said comparing unit.

6. The system multiplexing apparatus according to claim 5, wherein

said setting unit calculates audio buffer remaining capacity, determines whether a buffer overflow occurs or not if an uncompleted audio pack is output, and determines whether the audio pack is to be completed or not.